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EXAMINER
SENFI, BEHROOZ M

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2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 October 2008_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _9-33_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _9-33_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _30 July 2007_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   The previous rejection, mailed 5/29/2008 has been withdrawn, because of the new ground

of 35 USC 101 rejections.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

3.   Claims 1-33 are rejected under 35 U.S.C. 101 because; the claimed invention is directed

to non-statutory subject matter. It is noted that the invention as claimed is directed to "a method

of encoding a video sequence, comprising the steps of providing, encoding and performing".

Such invention is non-statutory; because the inventive steps of the claim fails to positively tie to

another statutory class or structure. Therefore; such invention is not a patent eligible process

under Memorandum, dated May 15, 2008, clarification of "process" under 35 USC 101.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 15 and 17 – 18 are rejected under 35 U.S.C. 102(b) as being anticipated by

Tranchard (US 5,680,483).

        Regarding claim 15, Tranchard discloses, a method of encoding a video sequence (i.e.,

figs. 1 and 4) comprising; providing, in an encoded bit-stream, a first indication corresponding to

an intra coded picture (indication of the type of the picture, e.g., I picture, in the encoded bit-

stream as shown in fig. 1, col. 8, lines 1-32), the first indication indicating whether or not at least

a part of at least one picture is encoded with reference to a picture preceding the intra coded

picture in encoding order (i.e., fig. 1, col. 8, lines 1-32 indicates one picture is encoded with

reference to a picture preceding the intra coded picture, col. 8, lines 9-12 and the encoding order

is shown in fig. 1), the at least one picture having an encoding order succeeding the intra coded

picture (i.e., fig. 1, shows one picture having an encoding order succeeding the intra coded

picture, e.g., B picture shown in fig. 1 consider as one picture succeeding the intra coded picture,

col. 8, lines 1-32), and performing motion compensated prediction for a second picture with

reference to the at least one picture (i.e., col. 8, lines 8-11, second type of picture P is motion

compensated with reference to at least one picture).

Regarding claim 17, Tranchard discloses, a method according to claim 15, wherein the

first indication is provided in a picture header (i.e., col. 8, lines 35–37 and lines 49-51, indicating

header indicating picture type and additional information).

Regarding claim 18, Tranchard discloses, a method according to claim 15, wherein the

first indication is provided in a slice header (i.e., col. 8, lines 47-52, indication is provided in a

slice header).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tranchard (US 5,680,483) in view of Sullivan (US 2003/0156640).

Regarding claim 16, Tranchard discloses, a method of encoding a video sequence

comprises; providing, in an encoded bit-stream, a first indication corresponding to an intra coded

picture, and picture header providing information regarding the picture, as discussed in the above

claims 1 and 17 above.

Tranchard is silent in regards to explicit of, network abstraction layer unit-type syntax.

Sullivan (i.e., page 3, paragraph 0038) teaches the above subject matter, network

abstraction layer unit-type syntax.

In view of the above, it would have been obvious to one having ordinary skill in the art at

the time of the invention was made to use the network abstraction layer unit as suggested by

Sullivan in video coding and transmission of Tranchard to improve method of video encoding

and decoding and provide and enhance functionality such as random accessibility, as suggested

by Sullivan (i.e., page 2, paragraph 0022).

Regarding claim 19, the combination of Tranchard and Sullivan teaches, random access

point (Sullivan, fig. 5, indication of random access).

8.   Claims 20, 26 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by

applicant admitted prior art.

Regarding claim 20, applicant admitted prior art discloses, a method of decoding an

encoded bit-stream comprising, retrieving from the encoded bit-stream a first indication

corresponding to an intra-coded picture (i.e., fig. 2, 116), the first indication indicating that all

decoded coded pictures at and subsequent to the intra-coded picture can be correctly decoded

when a decoding process is started from the intra-coded picture (i.e., fig. 2, B20, B19, B20, can

all be correctly decoded when a decoding process is started from the intra-coded I16, since non

of these frames rely on any frames that need to be decoded prior to frame I16), and based on the

decoded first indication (i.e., I16) starting decoding from the intra coded picture and subsequent

pictures in display order (i.e., fig. 2 prior art, B20, B19, B20 and P18).

Regarding claims 26 and 32, the limitations claimed are substantially similar to claim 20;

therefore the ground for rejecting claim 20 also applies here.

9.   Claims 9, 12,13,23,24 and 29-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over applicant admitted prior art in view of Tranchard (US 5,680,483).

Regarding claim 9, the limitations claimed are substantially similar to claim 20, thus have

been addressed in claim 20 above.

The admitted prior art fails to explicitly show the claimed, using motion compensated

prediction with reference to one or more previously coded reference pictures, performing motion

compensated prediction for a second picture with reference to the first picture.

However, such limitations using motion compensated prediction with reference to one or

more previously coded reference pictures, performing motion compensated prediction for a

second picture with reference to the first picture, are notoriously well known in MPEG video

encoding/decoding, as evidenced by Tranchard (i.e., col. 3, lines 25-35 and cols. 7-8, lines 66-

32).

In view of the above, it would have been obvious to one having ordinary skill in the art at

the time of the invention was made to implement such teachings to improve the coding method

by modifying the video bit-rate and switch the bit-rate without any interruption, as suggested by Tranchard (i.e., col. 2, lines 20-30).

Regarding claims 12 and 23, the combination of applicant admitted prior art and Tranchard teaches, a method according to claim 20, wherein the indication is retrieved from a picture header (Tranchard, col. 8, lines 35–37 and lines 49-51).

Regarding claims 13 and 24, the combination of applicant admitted prior art and Tranchard teaches, a method according to claim 20, wherein the indication is retrieved from a slice header (Tranchard, col. 8, lines 47-52).

Regarding claims 29-30, the limitations claimed have been addressed in claims 12-13 above.

10.   Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of Tranchard (US 5,680,483) further in view of Sullivan (US 2003/0156640).

Regading claim 11, Tranchard is silent in regards to explicit of, indication is provided in network abstraction layer unit-type syntax.

Sullivan teaches (i.e., page 3, paragraph 0038) the above subject matter, network abstraction layer unit-type syntax.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the video coding and decoding of Tranchard in accordance with the teaching of Sullivan, for providing improvement in video encoding/decoding and enhance functionality such as random accessibility, as suggested by Sullivan (i.e., page 2, paragraph 0022).

Regarding claim 14, Sullivan teaches, random access point using a sub-sequence identifier (i.e., figs. 5 and 8).

11.   Claims 10,21,22,25,27,28,31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of Sullivan (US 2003/0156640).

Regarding claim 21, as indicated in claim 20, fig. 2 of applicant prior art shows decoding from the encoded bit-stream indication corresponding to a first coded picture indicating whether or not the first coded picture can be correctly decoded when decoding is started from the intra-coded picture.

However, applicant admitted prior art is silent in regards to, discarding the first coded picture without decoding; and continuing the decoding process with the encoded pictures succeeding the first coded picture in the decoding order.

Sullivan (i.e., fig. 7, best efforts decoding and assured decoding, page 6, paragraphs 0077-0080) teaches discarding and continuing the decoding process, as specifies in the claim.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the video coding and decoding in accordance with the teaching of Sullivan, for providing improvement in video encoding/decoding and enhance functionality such as random accessibility, as suggested by Sullivan (i.e., page 2, paragraph 0022).

Regarding claim 22, the combination of applicant admitted prior art and Sullivan teaches, a method according to claim 20, wherein the indication is retrieved from network abstraction layer unit-type syntax (Sullivan, page 3, paragraph 0038).

Regarding claim 25, the combination of applicant admitted prior art and Sullivan teaches, a method according to claim 20, wherein a random access location is determined by examining sub-sequence identifiers for encoded pictures (Sullivan, figs. 5 and 8).

Regarding claims 27-28, 31 and 33, the limitations claimed are substantially similar to claims 21-22 and 25, therefore the ground for rejecting claims 21-22 and 25 also applies here.

Regarding claim 10, the limitations claimed are substantially similar to claim 21; therefore the ground for rejecting claim 21 also applies here.

Response to Amendment

12.   Applicant's arguments filed 9/29/2008 with respect to claim 15 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 9-14 and 20-33 have been considered but are moot in view of the new ground(s) of rejection.

Response to remarks:

Applicant asserts (page 2, lines 8+) that, according to claim 15, a first indication is provided in an encoded bit-stream, thus indicates whether or not all coded pictures at and subsequent to an intra-coded picture in display order can be correctly decoded when a decoding process is started.

In response; claim 15 does not recited the limitations as applicant argues.

Contact

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Behrooz Senfi whose telephone number is 571-272-7339. The examiner can normally be reached on M-F 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Behrooz Senfi/
Examiner
Art Unit 2621